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SCHOOLSCAPES

WORKING TOGETHER
TO INSTRUCT, SOCIALIZE AND PROVIDE QUALIFICATIONS

COLLECTIVE COMPETENCIES

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Reach for your **Dreams**

Québec

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choolscapes is making a shift to on-line access. Perhaps you have already noticed that the print version of the magazine has been reduced from 24 to 16 pages. While meeting the need for economy, we also want to continue offering you complete reports. Therefore, from now on we will post a longer version of the magazine on the Internet. We invite you to visit the Web site of *Schoolscapes* and *Virage* regularly. True to our original mandate, we will continue to cover and expand on the themes addressed during important meetings on the reform.

This issue features a report on the development of collective competencies, the theme of the Provincial Meeting held May 2 and 3, 2005, in Québec City. This topic is tied to the renewal of pedagogical practices, which not only depends on the collaboration of all people concerned but also encourages that collaboration.

Another article explains how some schools are approaching their management practices as a way of promoting educational success and making their school's organization work better for students.

Finally, a teacher from the pilot secondary school Cavalier-de-LaSalle presents learning and evaluation situations she developed in accordance with the new Science and Technology Program in the Québec Education Program.

Enjoy your reading!

Colette Boucher

Gilbert Moisan and Michelle Pelletier, Service de la recherche, DRSI

In February 2002, the Ministère de l'Éducation and the Fonds québécois de la recherche sur la société et la culture launched the Research Program on Student Retention and Academic Success. One of the program's objectives is to promote the development of knowledge and instruments that contribute to academic success. To this end, two research studies were recently carried out under the program.

In *L'effet de différentes approches évaluatives sur l'engagement et la persévérance scolaires dans le contexte du passage du primaire au secondaire*, Roch Chouinard and his team from the Université de Montréal look at the effects of different evaluation approaches on school commitment and perseverance in the transition from elementary to secondary school. Two main evaluation approaches were identified: the unimodal approach, characterized by the use of tests and exams, and the multimodal approach, characterized by the customization of evaluation practices, student participation, a variety of measurement tools and less frequent use of texts and exams. The effects of the two approaches on students' motivation to learn and their social adjustment in the classroom were examined in elementary and secondary school, among boys and girls.

In *Les mots pour le dire : richesse lexicale et réussite scolaire au primaire*, Lori Morris and her team from the Université du Québec à Montréal present the results of an evaluative research study that aims, first, to identify students in French-speaking and English-speaking elementary schools who are at risk for experiencing language difficulties, and lexical difficulties in particular. The authors then assess the influence of factors such as age, sex, the language situation at home and the family's socioeconomic status on the development of lexical knowledge and school success. The researchers also designed an educational software program to help students catch up and improve their lexical knowledge.

The complete research reports (in French) will be available for downloading from the Web site of the Fonds québécois de la recherche sur la société et la culture, at the following address:

<www.fqrsc.gouv.qc.ca/recherche/index1.html>

Public Library Week

October 16 to 22, 2005

Responsible and committed public libraries

Last year's Public Library Week was a resounding success. The invitation to the public and the use of coffee-shop spaces rallied the library community and reached many new users. Pleased with her experience last year, Micheline Lanctôt has once again agreed to be the spokesperson for Public Library Week.

Public libraries will once again be in the spotlight. Citizens are invited to discover their library while helping to preserve the environment by participating in the campaign to use recyclable and reusable bags.

To learn more, consult the program of activities on the Web site of the 7th Public Library Week and find out about the province-wide contest, *Follow the trend*, at **<www.bpq.org/semaine>**.

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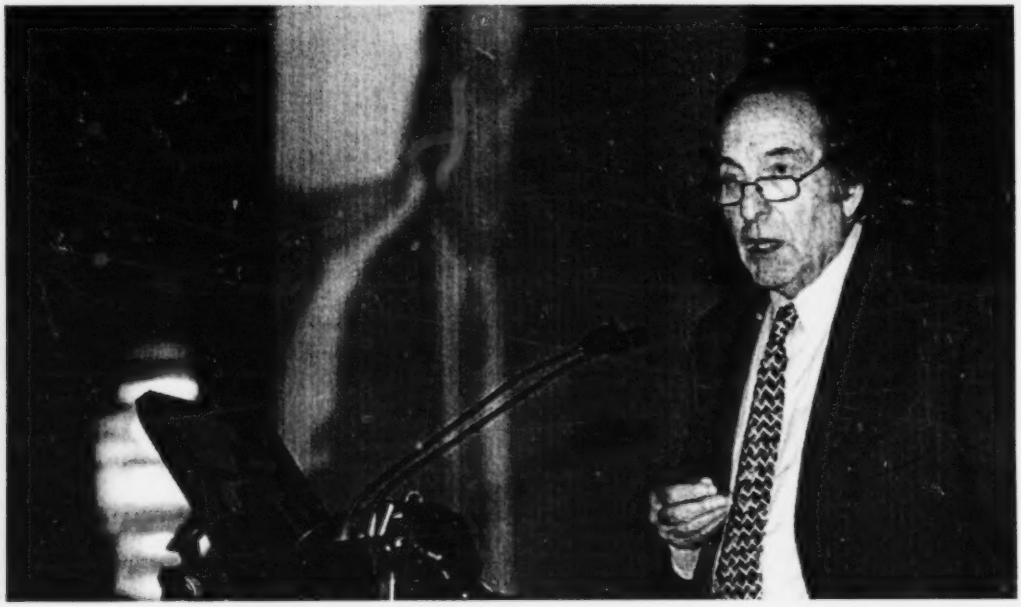


By Pascale Sauvé

Collective Competencies

At the Provincial Meeting held on May 2 and 3, 2005 in Québec City, participants discussed the development of collective competencies. Their reflection was enriched by guest speaker Guy Le Boterf, who presented a few working hypotheses. To marry theory and practice, *Schoolscapes* met with people belonging to dynamic communities that are developing collective competencies and networks to successfully implement the Québec Education Program.

Companies and organizations are increasingly concerned with collective competencies," said Le Boterf, who provides consulting services to a variety of organizations. "I am convinced that in the next ten years, collective competencies will be as important as, if not more important than, individual competencies. We know that collective competencies are more than the sum of individual competencies. But in practical terms, how do you approach them?"

He presented two entry points. First, he proposed looking at the collective aspect of the individual competency. "We know that, given the current complexity of problems and situations, it is less and less feasible to be competent on our own," he explained. "In order for a person to act competently, that person has to mobilize not only his or her internal resources, but external resources as well. Consequently, if the external resources do not exist, are of poor quality, are not accessible or are out of date, then the person loses his or her capacity to act competently." This means there is a close relationship between individual and collective competencies. As well, if you want people to act competently, you have to not only develop their personal resources, but also ensure access to a certain number of external resources and develop their capacity to use them.

A second entry point is to look at the collective competency in terms of cooperation. "For every work situation that a person must manage, we can systematically determine the key cooperative relationships that need to be put in place."

Some indicators of cooperation

How do you know if a group is cooperating well? Here are several potential indicators.

- Shared and compatible representations (of the problem, the project, the event or the reform), whether they relate to administrative management, finances, teaching practices, etc.
- Synchronization of actions: people act with and according to each other so that actions take place at the appropriate times.
- Good communication and mutual understanding: each member is able to understand the other person's logic, reasoning, priorities and constraints.
- Mutual sensitivity: people in a cooperative group have acquired a high degree of awareness of others' culture, body language, expression and tone of voice to know whether or not someone is ready to receive information and work cooperatively.
- Relevant and flexible organization: the group is able to assess its organization in relation to the type of situation or problem to deal with according to the context, priorities and events.
- Cohesion and sense of community: there is a mutual helping relationship between the different levels or categories of expertise or between generations.
- Acceptance and management of conflict at the proper time: when the group is faced with a conflict or diverging points of view, it is able to set priorities.
- Consideration of the "details" that can promote cooperation or that can, on the contrary, derail the process.
- The use of collective experience reviews and loop learning, such as analyzing how the group solved a problem so that it can improve its cooperation the next time a similar type of problem arises.
- Insight and "a feeling of collective effectiveness" so that the group has confidence in its use of its resources to achieve its objectives.

What conditions are required for a group to cooperate effectively? "There must be a certain number of favourable conditions brought together along three axes: knowing how to cooperate, being able to cooperate and wanting to cooperate," said Le Boterf. "The more favourable conditions you have along these three axes, the more you maximize the chances for a group to work effectively."

Knowing how to cooperate: mutual training, using opportunities for cooperation, shared professional culture, training situations that make use of cooperation, sharing of practices, shared knowledge and competencies, training with ICT, loop learning or times for regulation and collective designing of tools

Being able to cooperate: team responsibility perimeter (its powers, objectives, means, mission), indicators of collective performance, team make-up (varied and complementary), operational rules, regulation mechanisms, common operational language, an information mechanism, adequate layout of space, time management, mapping of competencies or directory of expertise, rules governing mobility, etc.

Wanting to cooperate: shared concerns and objectives, challenges, social interaction, establishment of trust, compensation (but without competition)

"Experience has proven one golden rule," said Le Boterf. "It is better to have strong consistency in a few simple measures along these three axes than to have weak consistency in sophisticated or partial measures. The idea is to create a favourable environment to maximize the chances that people will act competently."

To illustrate what he meant by consistency in management, Le Boterf used the metaphor of gardening. "When gardeners want to make plants grow, they don't pull on the stems; they work to create a favourable ecology and environment. In the same way, managers have to make sure there is a favourable ecology in order to maximize the chances that the members of the group will act with competence and in cooperation with each other."

Networks

The creation of networks ties in directly with collective competencies and cooperation. But what is a network? "It is a set of resources that interact according to the objectives sought, without any significant hierarchy between members," said Le Boterf.

While there are many professional networks, Le Boterf described three main types.

- A network that provides support to a professional or to a group of professionals by facilitating their access to external resources, enabling them to act competently and reducing their isolation.

- A network of groups who come together to plan an action, build a project together, or experiment. This may lead to material products, tools or a new organization.

- A network for sharing best practices. "These networks have double added value," he noted. "By sharing practices, you create collective knowledge—that is, lessons that can be transferred to other practices—and stimulate creativity. There is also an individual added value, since each person can improve his or her own practices by learning from the experience of others."

What are the favourable conditions needed for a network to work well? Le Boterf identified several elements to take into account, along the same three axes.

Knowing how to cooperate in a network: proficiency in disciplinary and interdisciplinary languages, communication and mutual understanding, loop learning, times for regulation, reviews of the cooperation experience, collective designing of tools, mastery of ICT, etc.

Being able to cooperate in a network: leadership, group make-up (varied and complementary), regulation mechanisms, rules (communication, confidentiality, functioning), work methods, mapping of resources, appropriate equipment, databases and legitimacy

Wanting to cooperate in a network: visibility of the collective and individual added value, summary of progress made, charter or relationship of trust, social interaction and solidarity, and valuing of individual contributions

"There is one common element," Le Boterf concluded. "Both individual competency and collective competency come about when people combine the resources they apply. Thus, for managers, the key is to create a favourable environment and conditions in which these combinations of resources can be built and used." There lies the challenge!

In the field

At the Commission scolaire René-Lévesque, a new approach has been implemented over the last few years to foster a renewal of teaching practices in schools. The strategy is largely based on developing collective competency and networking.

"For us, what's important is that all school board employees who go outside for professional development share what they learn," explained the director of educational services, Bernadette Desjardins. Covering a territory of over 320 kilometres on the southern Gaspé Peninsula, from Percé to Matapedia, between the Baie des Chaleurs and the Chic Choc Mountains, the school board team must continually find new ways of doing things. "Because we're far from the major cities, it's always a challenge for us to find resource people," said Desjardins. "So, a few years ago, we asked ourselves how we could maximize training, information sharing and networking. We established the principle that anyone who goes to a convention, a conference or a training session should share that information with his or her peers."

The school board set up key networks, such as a pedagogical support group that meets every six weeks, bringing together school administrators, education consultants, and educational services and complementary educational services personnel. "The purpose of this group is to develop and support the pedagogical leadership of the school administrators," Desjardins explained. "It is a place for collective professional development and renewal." At each meeting, the team focuses on a pedagogical theme chosen by the participants. The time is used to share the training some members have received, adapting the material and information to their own needs and context. For example, a team of five people from the school board attends the Provincial Meetings organized by the Ministère de l'Éducation, du Loisir et du Sport (MELS). On their return, these team members are responsible for preparing workshops for their peers at the pedagogical support group.

"There's the training aspect, but at the pedagogical support group, we also share our successes and our difficulties," Desjardins added. "We have two lead schools in the school board. At each meeting, they share their experiences, things that have worked and those that haven't. They keep us up to date on what they're doing."

Innovative ideas

"We always start with the principle that the more input people have in decision-making, the better the results will be," said Desjardins. Hence, the school board has opted for decentralization. "This means the budgets for the reform are decentralized in the schools," she explained. "Each school has to come up with a professional development and continuing education plan for its staff—which obviously created needs and demands on educational services. We have very few education consultants, so we really have to work together to meet the needs of the schools." The expanse of the territory, even though the board has just 6000 students, means that time is precious for this small educational and complementary educational services staff. "We had to set up new structures and mechanisms to consult with each other," Desjardins added. "We set up sector-based groups, where educational services staff meet three or four times a year to plan, share and learn to be as effective as possible."

École Le Bois-Vivant, which has students from preschool to the end of Secondary Cycle One, is one of the school board's two lead schools. "To align the school board's and the school's approaches, we set up a process for finding solutions as an expanded team," said Diane Arbour, vice-principal of École Le Bois-Vivant in the Commission scolaire René-Lévesque and a trainer. "When a problem arises with a student or a group of students, we ask people outside the school, such as the educational and complementary educational services staff, to work with the school team. They pool their competencies to find solutions."

"When everyone works together, you get interesting results," added Desjardins. "We start with the premise that teachers are professionals. Instead of giving general training sessions, we work with the needs and problems that arise. Our limited staff and other constraints have prompted people to be more creative: they have invented a new operational model for meeting needs."

The same logic is applied at École Le Bois-Vivant. "We implemented participatory management: we asked teachers, 'How would you like to proceed? How can we develop competencies together?' Now we reserve meeting time so that staff can develop learning situations as a team." One team of teachers has a bank of 15 days to work in small groups. "One of the winning conditions has been to plan half-days throughout the year to support ongoing work by the cycle team," explained Arbour. "This way, teachers start working, try things out, and then fine-tune them in the following meetings. These are times for creation and regulation."

How do they make this approach work? "Obviously, for any change, there is a period of resistance and denial; you have to go through it," said Desjardins. "You have to create winning conditions. You have to be creative, offer encouragement, value each person's work and use every little success as a springboard to go further."

By Eve Krakow

Partnering schools

In the English sector, developing collective competencies has been part of the mandate of the lead and pilot schools network for some time. Last year, members partnered with other schools to further expand this network.

For several years now, teams from the 28 elementary and secondary lead and pilot schools have come together twice a year for a one-day conference to share information and best practices. Yet Elizabeth Therrien-Scanlan, executive director of the Québec Association of Independent Schools (QAIS) and now chair of the Implementation Design Committee (IDC), explains that the IDC was concerned about whether the benefits gained at these one-day sessions were making their way into the broader school community. So last year, each lead or pilot school was encouraged to partner with another school in its board or association. The partner school was invited to bring one administrator and one teacher to the April conference, joining the team of two teachers and one administrator from the lead or pilot school.

The morning of the April conference was devoted to the evaluation component of project-based learning. Then, in the afternoon, each lead and pilot school worked with its partner to begin planning a joint project.

The joint projects are one-day events involving planning and professional development. The schools have until Oct. 1, 2005, to send their project proposal to their director of educational services, who then has until Oct. 15 to approve the proposal and send it to the IDC. Projects must take place before June 2006. The IDC will pay for substitution of the three participating teachers (one from the partner school and two from the lead or pilot school) and lunch on the day of the project. "The projects run the full gamut, covering various aspects of the QEP," said Scanlan. For example, one project involves the integration of technology into project-based learning.

Essentially, the goal of this type of initiative is to continue developing school teams' expertise. Perhaps one or more groups who have already carried out their project will share their experience with others at the next lead and pilot schools conference. Eventually, a database of these projects will be available on the QESN-RÉCIT Web site.

By Pascale Sauvé

Québec English Schools Network-RÉCIT

The QESN-RÉCIT is not a project, but a community of collaboration," said Beverly White-Weber, director of the QESN-RÉCIT. "Our mandate, like that of the province-wide RÉCIT in the French sector, is to promote the instructional use of information and communication technologies (ICT) in the classroom in accordance with the Québec Education Program. In addition, the role of the QESN broadens this mandate to cover all subjects, all cycles and all specific communities. This mandate would be impossible to fulfill without working as a community and in collaboration with each other." The mission of the QESN-RÉCIT is to support and promote pedagogical collaboration and innovation in the learning community. This mission gives rise to a multitude of projects and partnerships involving the RÉCIT designers, education consultants and other people in the education community.

"In carrying out our mandate and our mission, we faced several challenges," said Christiane Dufour, project coordinator for the QESN. She named three. The first was how to reach a clientele that is scattered across the province. "Of course we have communication tools and a Web site, but to act on the practices of teachers, you have to work with people," she explained. "This means there have to be resource persons working in the schools, such as education consultants, RÉCIT leaders and dynamic teachers." From this observation arose a second challenge: how to reduce the isolation of people in the schools. "We had to find ways

to reach out to them and to create bridges with us and among themselves," said Dufour. The third challenge was how to deal with the high staff turnover—about 25 per cent each year. "This makes it difficult to ensure continuity from one year to the next. In some respects you feel like you're starting from scratch each time. So we had to find a way to help people become effective very quickly in order to keep our process moving."

The solution they found was to have people work together on projects and as a network. "We try to work with people, that is, to work on projects together," said Dufour. "Obviously, we have several projects in progress at once." For example, a group of people with a particular area of expertise might work on creating training workshops for teachers, while another group might work on portfolios. "One interesting fact is that these small groups travel, so there's a transfer of expertise. As well, the dynamics are such that people from very different environments and from across the province are currently working together in teams."

How do you recognize when a group is working well together? "When the members know that they can ask for help and that they will receive it, without feeling judged, you can deduce that there is good collaboration," answered Weber.

Commission scolaire des Grandes-Seigneuries

"We're currently working on several projects," said Carole Blouin, assistant director general of the Commission scolaire des Grandes-Seigneuries. "Our goal is first and foremost to build a cooperative approach throughout the entire organization on a daily basis."

Their first observation: as a manager, a professional or a teacher, you have to remain a learner if you want to be able to support and guide staff or students in their learning. This school board has adopted a systemic approach, using any opportunity that presents itself to increase teamwork, with a participation structure that aims to be flexible and transversal, rather than vertical. "Our development is no longer determined by our structure, but rather, by the needs, problems, challenges and themes we have identified," said Blouin. "Once these have been established, we form a problem-solving network." Some examples of collaborative projects are the implementation of the strategic plan, an educational project and a success plan in the school; the development of a pedagogical leadership model that focuses on shared leadership; reflection on at-risk students in secondary school; networking of teachers for ICT development; and reflective practice as a group.

In the current context, with schools facing increasingly complex challenges, the team at École des Timoniers in the Commission scolaire des Grandes-Seigneuries quickly realized that it is impossible to work alone. "The first change we wanted to make was to reduce the isolation of teachers and school administrators," said the school principal, Josée Fontaine. "We wanted to get teachers out of their classrooms, to get them to believe in their collective role in developing the school, and to make them want to participate in that development." They proceeded step by step. "First, before even joining a group, teachers must believe in their own competency. Encouragement and positive feedback are essential. We wanted to help teachers to develop their individual competencies and then to feel the need to work with others, which is not easy. You can get teachers to work in a committee where everyone contributes their own ideas, but they won't necessarily feel the need to work interdependently, recognizing what each person has to offer to the others!"

What indicators of cooperation have they observed? "When a group is working successfully as a team, you can see that decisions are applied much more easily," said Blouin. "When each person is a partner and feels ownership in the decision, that's a big step toward its concrete realization. You also see a lot of creativity, innovation and action." For Fontaine, "there is true cooperation or a feeling of collective competency when there is more listening, openness and recognition for each person's competency. At the end of the day, you can sense a true feeling of belonging to a team, and you're proud of the work accomplished. When that happens, I feel we've made a step in the right direction!"

Carrefour National de l'Insertion Professionnelle en Enseignement (CNIPE)

e decided to create a provincial network to support both teachers starting out in the profession and managers, mentors and administrators who want to set up support measures in their schools and school boards," explained Lorraine Lamoureux, head of the teacher induction program in the Commission scolaire de Laval and one of the creators of the CNIPE. "These are resources to help new teachers integrate more harmoniously into the profession." While the project is still in its early stages, it is off to a good start. It has a Web site and some resources available. The CNIPE has teamed up with several partners in the university community, as well as experienced educators (as mentors). "Eventually, we hope to reach all regions of the province and to support local teams not just in their reflection process, but in their actions to set up projects in their schools and school boards. Mostly, we want people to take action. That's what matters."

What are the reasons for the project? "Briefs by the Comité d'orientation de la formation du personnel enseignant (COFPE) and the conference on teacher induction that took place in Laval last May enabled us to identify several major, pressing needs, given that the teaching body is getting younger," said Martine Boivin, an elementary school teacher and member of the CNIPE team. "That motivated us to find a way to create a network of partners and to provide support, both to new teachers and to people providing guidance to those new teachers, in all schools." Young teachers often face a difficult situation: integration at varying times in the year, multiple and partial tasks, etc. As well, their expectations are often very different from reality. These difficulties lead to loss of motivation, anxiety and feelings of incompetence. "To encourage new teachers to persevere, we felt it was important to offer them guidance that was better suited to their needs so as to reduce their isolation, make them feel listened to and give them a chance to talk to each other or a mentor, as a way of lightening their load. All this is in order to continue to develop the competencies they acquired in their initial teacher training," added Boivin. The project also aims to support schools and school boards. "Everyone wants to attract good new people, to train and to retain them. This problem led us to think there was a need for involvement at all levels—the Ministère, the school board and the school. Often, there is very little time, money or information for setting up a program for new teachers. So we provide a place where they can get information and discover the conditions that need to be implemented in order for support and guidance to be effective. We want to be a springboard to allow our young teachers to continue their professional development."

Institut Saint-Joseph de Québec

Our original idea was to get people to act more as a learning community," said Mario Asselin, the institute's director. To do so, the Institut Saint-Joseph created a virtual network for teachers, students, parents and anyone interesting in interacting with others. Each one of the staff members and the 170 students has his or her own personal Web site. A student can post a book report on his or her site and other people can add their comments. Teachers can work on projects together, and can ask questions and get feedback from specialists. This environment also enables parents to follow their child's progress more closely. "The goal of the project was to give meaning to the school's requirements," said Clément Laberge, who is working at the institute as a consultant to set up the project. "It's huge! For example, if we take the quality of French, we figured that for students, writing a text that would be published in a public space and that could be read by many people would be much more meaningful. If a child knows that when he or she writes a book report, the author might read it, the child won't write it in the same way." For the team, the challenge was finding means and tools to set up the network around the teachers, the students and the school and making it a place where students and teachers can communicate, express themselves, become informed and give feedback.

What indicators of cooperation have they observed? "We had one big challenge in this project: we realized that isolation is comfortable for many people," said Laberge. "Coming out of that isolation means accepting a degree of vulnerability. We therefore encouraged people to share the conviction that you're never alone with a problem, a difficulty or new learning—whether you're an administrator, a teacher or a student. If you take the time to clearly identify the challenges you face, you've already taken a big step, and you can join a whole network of partners who will be able to support you in meeting those challenges." Asselin made another observation. "The more you work with others, the more you realize it's harder than you thought! It's like jazz: only when you start to really appreciate the music do you realize how much you have to learn."

Mario Asselin, director of the Institut Saint-Joseph de Québec

Clément Laberge, consultant at the Institut Saint-Joseph de Québec, at the network's presentation

The Capitale-Nationale and Chaudière-Appalaches regions

"We've developed a model for experimenting with the Québec Education Program in secondary school," explained Marie-Sylvie Descôteaux, regional director. "It's a model of a learning organization put together by the educational services team and the teaching coordinators' team with the regional office." She noted two key elements of the model. First, it is based on teams in the secondary schools, called interest groups. "The teachers formed groups according to their own interests and what they wanted to experiment with (cycle work, subjects, evaluation, etc.). The topics were chosen by the teachers, because we felt that would give the project more meaning and foster motivation from the start." Educational services generally provide guidance to the interest groups. "This element may vary, since we respect the dynamics of each school board, according to how they are already set up in terms of continuous professional development," said Descôteaux. On the regional level, a consulting group was created, made up of resource people from the school boards, who focus on the thornier issues. "We gave the school boards the responsibility of working on aspects that posed less of a challenge, aspects that our experts in educational services are more familiar with, while the consulting group tackles challenges that are new to school boards. In this way, we're working together to build new knowledge and tools." To support the various groups and the school boards, a resource person was hired and a regional Web site created. "This site enables everyone to share the fruits of their labour or the problems they would like to delve into further. Information is therefore shared and accessible to everyone."

"The learning-organization education model for secondary school was adopted in 2001-2002, following a broad consultation among teachers," explained Nathalie Vézina, a partner teacher representing the Commission scolaire des Premières-Seigneuries. "We also learned from the experience in elementary school, where traditional training sessions had met with varying degrees of success; there was little transfer and application in the schools. We noted a lack of interaction between theory and practice." These perceptions were then validated by teachers, who said they preferred to carry out small experiments in the classroom, and then discuss them with their peers and make adjustments. "Teachers find this kind of guidance and cooperation reassuring," said Vézina. "They have been meeting for two years now, and you can feel they are more involved. Today we can say that we're trying out a lot of new things in the classroom."

What conditions should be set up to foster cooperation? "You have to regularly remind yourself of the reasons why you set up the model," said Descôteaux. "You also have to focus on self-regulation, continually re-assessing the model and adjusting it as needed."

By Eve Krakow

The Guidance-Oriented Approach to Learning

In welcoming participants, Noel Burke, Assistant Deputy Minister for the English-speaking sector, proposed *integration* as the buzzword for the day. "What we're attempting to do is to integrate the three worlds that our students experience in their lives: the world of the classroom, the world around them, and the world inside their head. I would suggest that success in education can be measured by our ability to connect these three worlds."

Co-hosted by the Ministère and the GOAL Networking Committee, the event featured presentations on projects in different schools and tools for implementing GOAL. To open the session, four students shared their experiences and their thoughts on the kinds of work-related activities they would like to see in schools. Guest speaker Phil Jarvis of the National Life/Work Centre then talked about today's changing world of work.

Hands-on experiences

As a little girl, Judit Illes aspired to be an actress, a singer or a dancer. Later, she added reporter, film critic, food critic, photographer, advertising agent, public relations agent and other occupations to this list. In Secondary V at The Study, Judit said that some experiences helped her narrow her choice.

The most rewarding was a day of job shadowing organized by her school at the corporate affairs division of Pfizer. She attended a meeting on the launching of a new drug, viewed an executive's video for company employees and was introduced to various aspects of corporate communications work. Judit also witnessed public relations staff in action.

At her school's annual career day, professionals from fields as varied as journalism, robotics, pastry making and forensic anthropology shared their passion for their work and answered questions. "I think one of the most important things schools can do is to bring in professionals who speak about their work with conviction," said Judit.

Abhinav Gupta was just 5 years old when his father brought home a CD-ROM on space. Now in Secondary Cycle One, Abhinav wants to be an astrophysicist, "someone who explores the sciences of space and who can make a difference," he explained. Throughout elementary school in the Lester-B.-Pearson School Board, his teachers recognized and nurtured his interest, introducing him to related programs and activities. "If a student has a goal or is really inspired by a specific subject," he said, "teachers should find a way to let that come out and encourage them to go in that direction."

Jessica Hill wasn't a strong student in her early years of secondary school, and didn't take her studies seriously: she felt her teachers didn't care. Then, in Secondary IV and V, a new teacher made an impact. "His teaching methods made learning relevant to me. He engaged students with humour, interactive and inquiry-based learning. He made me feel like an equal."

The school also hired a full-time guidance counsellor who was enthusiastic, organized and motivated. Yet Jessica said she gained the most from hands-on learning projects outside the classroom, including a work placement and an archeological dig. She is now studying geography and history at Heritage College.

Jonathan Sanzone says he didn't have any job shadowing or job placement opportunities in high school—but he certainly would have liked some. Like many undecided students, he went into social sciences in CEGEP, and later realized it wasn't for him. Finally, thanks to a helpful guidance counsellor, he found his path: he's now studying industrial drafting at the Rosemount Technology Centre, and intends to pursue his studies in industrial electronics at Vanier College. "Students should know that if they don't enjoy what they're going, they should think about doing something else."

Being and becoming

Once upon a time, people chose a career, studied for it, graduated, obtained secure employment, moved up the corporate ladder, and then retired at a set age. Phil Jarvis emphasized that this is no longer the case. "It is now projected that the average student coming out of high school will have up to 20 jobs and multiple occupations in three different sectors." This means we have to change our way of thinking about career choices.

Jarvis believes that while equipping young people with information to help them make choices is still critical, it is just one piece of the puzzle. He suggests that we have to move from a paradigm of *career choice* to one of *career management*—that instead of thinking in terms of *deciding what to do and when*, we have to think in terms of *being and becoming*.

Armed with a barrage of statistics, he pointed out that traditional career counselling is poorly suited to today's world. Nearly half of young people change programs or drop out by the end of their first year of postsecondary studies. Of those who graduate, 50 per cent take jobs not directly related to their studies. And the majority of adults end up where they are as a result of chance rather than by planning or choice: 69 per cent of adults think they're in the wrong job and are not fully engaged in their work. Not only does this result in a lot of unhappy people, but the economic costs in terms of productivity loss, stress-related health problems and retraining are high.

The new work environment is characterized by global competition. Organizations are continually reorganizing and redefining their missions. People do more jobs and hold occupations in more sectors. In small businesses, people have to be flexible and wear many hats. A person's job security lies not within a company, but in his or her employability.

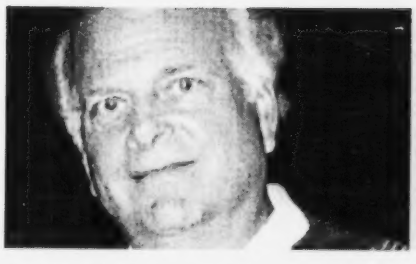
"The new career management paradigm is not about making the right occupational choice," Jarvis explained. "It's about developing the competencies—skills, knowledge and attitudes—people will need all their lives to be healthy, self-reliant, resilient citizens, able to find work they love in times of constant change in the work force."

This means that we should no longer be asking, "What do you want to be when you grow up?" but questions such as, "Who are you now, and what do you love to do? What are your special gifts, talents and skills? What types of situations, environments and work roles appeal to you?"

Young people still need information, Jarvis stressed; however, information on its own is not sufficient. They need personal support and career management competencies. "This last element has been the missing link."

To date, students have learned these competencies by chance, through their family, hobbies, sports teams and friends. Jarvis contends that this learning should be more systematic: job shadowing, work placements, bringing in professionals from the community and engaging students in real-life projects are some of the ways schools can provide this learning. He observed that Québec is moving in this direction with the QEP and initiatives such as GOAL.

"Helping students become intentional career managers is good for them, and for their families and communities," Jarvis concluded. "It is a learning challenge more than a counselling job. And it's everyone's job."



"It is now projected that the average student coming out of high school will have up to 20 jobs and multiple occupations in three different sectors."

Phil Jarvis is Vice-President of Partnership Development for the National Life/Work Centre in Ottawa. He authored the Choices computer-based career-planning system, founded the Canada Career Information Partnership and is co-author and national coordinator of the Blueprint for Life/Work Designs.

A few resources

The Guidance-Oriented Approach to Learning

www.qesnrecit.qc.ca/goal

Canada's Blueprint for Life/Work Designs

www.blueprint4life.ca

The National Life/Work Centre

www.lifework.ca

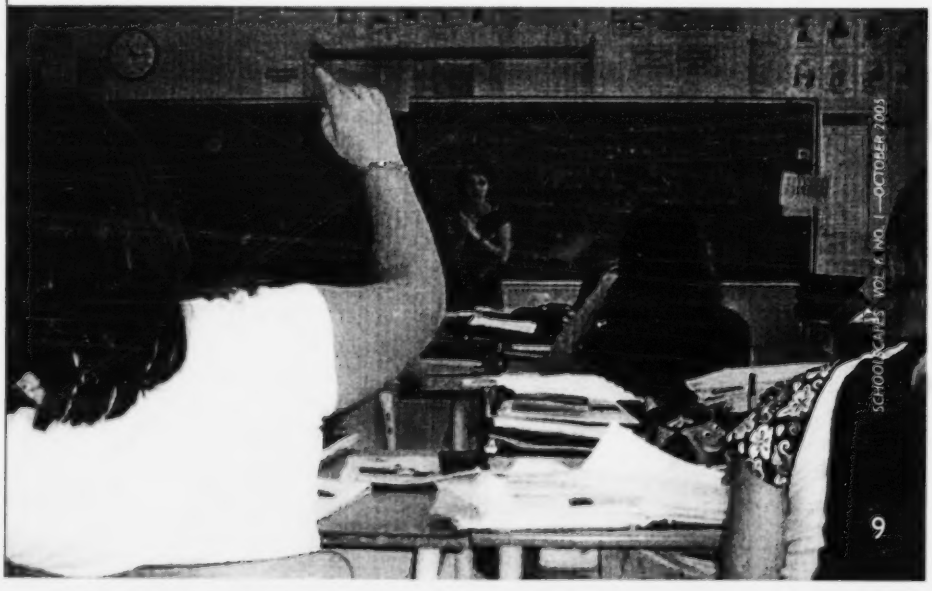
The Real Games Series

www.realgame.ca

By Marie Hélène Giguère

A student-centred school organization

The organization of services in Secondary Cycle One should enable students to remain in regular classes while providing a variety of support measures and various types of groupings to meet their needs. Individualized paths for learning are no longer the only service model for students with difficulties in secondary school. In fact, research shows that such models are only moderately effective. Individualized paths lead students along a parallel course, and the longer they stay in them, the harder it becomes for these students to go back into regular classes. "Often, these students find themselves stigmatized socially. They're perceived negatively by teachers of regular classes, parents and, especially,



the other students," said Joncas. "Special education has to be seen as an adaptation of regular services. Services should be organized according to students' needs, and regular classes should be viewed as the primary place for intervention."

"Input from teachers and complementary educational services personnel in finding solutions is very important," she added. Therefore, how can a school administration, by going through a process of reflection aimed at developing a plan of action to rally its personnel, organize its services in accordance with ministerial orientations?

Avenues for solutions

"You have to focus on your strengths and on what you have control over," Joncas began. "You have to be attentive to the organizational and operational methods in your school or classroom. If you can create a climate that is conducive to learning and success for all students coming into secondary school, then you will have created winning conditions. For example, is it possible to have all Cycle One classrooms on the same floor? What about designating a fixed classroom for a group of students and having different subject teachers come in to teach? Are there different ways of organizing remedial measures, homework assistance, etc.? What about tutoring and homeroom teachers? Is enough attention paid to developing the ever-so-important student-teacher relationship?"

Once the school's organization has been conceived in terms of smoothing the transition from elementary to secondary school, the school team can begin reviewing its teaching practices: integrating students into regular classes and providing support to teachers, planning resource classes in some subjects, grouping students according to their needs but also according to projects and forming short-term groups. "Most importantly, you should evaluate the quality of your services regularly according to your success plan, because you're always trying to improve the situation and learning conditions for your students."

Sainte-Anne secondary school

For the past three years, École secondaire Sainte-Anne in Daveluyville has been a pilot school for the reform. According to its principal, Guylaine St-Gelais, commitment by the school administration is crucial. "The school must have a clear vision that is shared by all personnel. Our school success plan influences our actions, by giving direction to our orientations and objectives. As a principal, it is my job to support the school team throughout this process. During school-team or cycle-team meetings, I try to feel the pulse of school staff. It's important for me to be involved in the discussions about our orientations and the decision on our success plan, as much as possible. For example, at our last meeting, the teachers expressed their interest in receiving training on the use of portfolios and enhancing differentiation. Now that they have some experience, they feel ready to further develop their teaching strategies. Although sometimes I make suggestions for professional development, I have to make sure not to exhaust the staff, but to give them time to assimilate new things. It's also important to create opportunities for reflection and discussion in order to meet our objectives and to take stock of what we've achieved and the challenges that remain."

The way École Sainte-Anne is organized also fosters the success of its students. "Our system of tutors gives a particular colour to our school organization," said St-Gelais. Tutors follow students' academic process, meet with parents and take part in developing individualized education plans. In a sense, they become the point of reference. "We also try to limit the number of people working with each student. Aside from the specialists, students have three teachers. The first is in charge of social sciences and French, the second teaches mathematics, science and technology, and the third teaches English. The students don't switch rooms: it's the teachers who go from one classroom to another."

Students' schedules have also been organized to allow for integrated projects. "Our day is made up of five 55-minute periods and a sixth period that lasts 25 minutes. This last period can be

"The school must have a clear vision that is shared by all personnel. Our school success plan influences our actions, by giving direction to our orientations and objectives."

used to carry out a project, to work on a particular subject, etc. Each week, at least one of these 25-minute periods is devoted to reading."

The school team is also concerned with students' transition from elementary to secondary school. "In June, we organize a day when teachers in the last year of Elementary Cycle Three meet our teachers in Secondary Cycle One. They can discuss things such as the self-correction methods used with students, instructional tools used in class, etc. It's important for students to make connections between their two schools to help them adapt to their new school environment. For students with special needs, I provide monitoring by the complementary educational services personnel. We work with the special education teacher and school psychologist on individualized education plans. The right people have to pass on the right torches."

According to St-Gelais, while it's not always easy, it's worth the effort. "You have to be flexible," she admits. "When the students are working on a project, you have to accept that they'll be wandering around the school, going from the classroom to the lab, from the lab to the library, etc. You have to keep an open mind, be open to new teaching methods and be creative."

"I won't pretend that there won't be more changes in the future," she concluded. "We're trying out different ways of doing things, and I think the role of a pilot school fits into a larger process of experimentation and development. On the other hand, I think that in order to achieve positive results, teachers need encouragement and recognition. The more you try to develop each person's strengths, the more activity you find in the classrooms!"

By Eve Krakow

Symmes Junior High School: Integrating Students with Special Needs

Symmes Junior High School, in the Western-Québec School Board, is a Secondary Cycle One school with 460 students. It has many students with special needs, yet everyone is integrated into regular classes at least some of the time.

About 20 students have been officially diagnosed with learning disabilities. They work together in a small-group setting for about one third of the periods in the nine-day cycle, working at their own level and focusing on English Language Arts and Mathematics. The rest of the time, they attend regular classes: geography, history, science, physical education and an arts elective. When necessary, the program expectations are modified for these students.

While teachers do not have any additional resource people in their classrooms for these students, the school has been organized to support the teachers in other ways. "Teachers are grouped into teams, and meet for one afternoon every nine days to talk about the difficulties students may be having," principal George Singfield explained.

The school also has about 14 students in its Centre of Excellence. These are students with severe disabilities, such as Down syndrome or autism. Yet they too are integrated into regular classes for some of the time. "Sometimes an aide will accompany them into the classroom, but we try to find areas where the student will experience success."

Then there are about 55 students who haven't been diagnosed with a learning disability, but who still require extra resources or support. When needed, these students work one-on-one with a teacher, for up to four periods. They also participate in special math and literacy lab sessions, where they receive additional support in a small-group setting.

The integration model works hand-in-hand with the school's "advisory" periods. These are 25-minute periods, four days a week, when students are in mixed groups. "It's not a homeroom or a time for homework," Singfield specified. "This time is used to look at organizational structures, prepare for exams or develop good study habits." Teachers not acting as advisors can work with students one-on-one or in small groups on a specific subject area, on social skills, or on whatever the need is.

As an administrator, Singfield feels his role is to support teachers and staff working with students, and to give them the capacity to do so—whether that means reorganizing the schedule or restructuring to provide additional support.

Integration also fits in directly with the staff's efforts as a pilot school for the QEP for secondary school. "The QEP allows us to integrate students with special needs successfully because it is competency-based," said Singfield. "For example, in mathematics, you can have people at different entry levels able to solve a situational problem, depending on the problem you give them."

The most important condition for successful integration, however, has been the teachers' team approach and high level of flexibility. Singfield gives them all the credit. "The teachers have created a very strong culture of collegiality, collaboration and sharing. I think those are fundamental components when you look at integrating students, because if the teachers aren't talking to each other, it's just not going to work."

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By Pascale Sauvé

When the school board called on school administrators to refer them to teachers who would make good models for new teachers, Doyon was approached to act as a mentor. "At first, I went mostly out of curiosity, to see what the program was about," recalled the special education teacher, who has been retired for a year. "As well, at that point in my career, I wanted to take on new challenges. So the timing was perfect." That was eleven years ago. Since then, Doyon has mentored about twenty new special education teachers. "For me, mentoring provided renewal in my career. It was a very enriching experience," she said.

Ten years' experience

Each year, Doyon meets one or two new teachers who put in a request to the school board for mentoring. "I always like to meet them first, before they make a decision, to make sure they feel comfortable with me, because mentorship is based on a relationship of trust." Teachers participating in the program each receive eight days of mentoring, which they can divide up according to their availability and needs. "We work in individual meetings," Doyon explained. "At first, I take the time to listen to them. I try to find out what their needs are, because each person is different. Some just need to talk about what they're going through, while others want to validate their practices. What young teachers remember and appreciate the most is our capacity to show empathy."

"When faced with a problem, I usually avoid giving advice," she continued. "Instead, I try to help them find their own solution and to support their development. I might say, 'What do you think you could do to deal with the situation?' Once the person presents a hypothesis, we can look at it together to decide whether it is realistic. In this case, it's very important for the teacher to feel encouraged and valued throughout the process, because young teachers often doubt themselves."

The relationship is based on mutual respect. "Young people appreciate being treated as equals," said Doyon. "I feel young people who have just graduated from university have a lot to offer, because they have new ideas and training. We each have something to give the other."

A few observations

In her years serving as a mentor, Doyon has made several observations. "I've noticed a certain fragility among new teachers. They often need to be reassured and to have their practices validated."

These needs are even greater in special education. "Working with children who have difficulties is a whole other reality," she explained. "You have to accept that there will be highs and lows. When the children are doing well, they often go back into regular classes. Then you take in new ones. So you are continually going back to square one. On the other hand, the work is always different, because each child is unique, with specific difficulties and his or her own family environment. It's very rewarding and never boring!"

According to Doyon, young teachers in special education have to learn to lower their expectations of themselves and recognize their limits. "We'd like to 'save' all the children with special needs," she said. "But you should never take all a child's problems on your own shoulders; there is a part you are responsible for and another part over which you have no control. You have to do everything in your power, but you can't solve everything on your own."

It is also important for teachers to be confident about their work, yet not to hesitate to seek help if needed. "Teachers starting out in special education need support and a word of encouragement," said Doyon. "The situations are sometimes difficult. Special education is usually considered a world of its own. You're often isolated in the school. Your rewards come from the children. When you see a child making progress, it's like a little pat on the shoulder! I think all young teachers in special education would benefit from having a mentor at some point in their career, whether it's to reduce their isolation, to talk about things, to confide in someone or to put difficult situations in perspective."

"You have to avoid pretending that everything is fine when you're feeling overwhelmed," said Doyon. "It's very healthy to recognize your limits and to react. Sometimes it just takes a little helping hand to regain your self-confidence and get back on track."

By Pascale Sauvé

Mentorship Program

"The overall objective of the program was the acquisition or enhancement of knowledge, skills and aptitudes that would enable experienced teachers to help integrate novice teachers into the profession," explained Hélène Reault, who is in charge of teacher induction at the Commission scolaire des Bois-Francs. First, a training program for mentors was developed in collaboration with the Université de Sherbrooke. The program was field-tested and evaluated. "After two years of action research, it was shown that mentorship met the needs of new teachers," she added. The program aimed to help teachers integrate into and adapt to the school, foster discussion, reduce their isolation, reassure them and recognize initiative. For the mentors, there was great stimulation in working with new teachers; at the same time, it was an opportunity for them to assess their own practices. Everyone benefited from the arrangement.

"At first, administrators chose mentors who were particularly dynamic teachers, who listened to others—in short, teachers they thought would be good models," Reault explained. "Later, after the merging of school boards, the mentorship project continued. Two years ago, we trained 25 new mentors from the whole school board."

How it works

The mentorship service is presented to school administrators as well as new teachers at the start of the year. Teachers enroll in the program on a volunteer basis. All teachers who submit a request are eligible for the mentorship service. They can then choose from a bank of mentors, who have all received training from the Université de Sherbrooke. Teachers receive eight days of mentoring, which they can divide up according to their needs (over one or more years).

"The number of requests varies from year to year, but we receive about forty a year," said Reault. "Mentoring is enjoying an increasingly positive image. Previously, mentoring was perceived as a crutch for people who were having problems and who were in difficulty. But that perception has changed. School administrators tell us that for them, it's a 'plus' when a teacher uses the service. When teachers ask for a mentor, it's because they have a certain amount of self-confidence but are aware that, in their new practice, they will have to improve and develop their competencies. It's a really positive experience for everyone!"

By Pascale Sauvé

When they realized that graduating students are often anxious about starting secondary school and have unfavourable prejudices about public secondary school—30 per cent turn to the private sector—the school

team at École Simone-Desjardins of the Commission scolaire de la Pointe-de-l'Île decided to review its approach. "Ordinarily, students in the first year of Elementary Cycle Three would go to the secondary school for a half-day visit," explained the elementary school's vice-principal, Guylaine Larouche. "Students appreciated this activity, but they didn't build on it. They viewed it more as an outing. So we thought of setting up a new activity that would be more meaningful and would represent a real rite of passage from elementary to secondary school." After some discussion, the team came up with an original idea: to organize a convention for students finishing Cycle Three.

When told of the idea, staff at Jean Grou secondary school quickly joined in the project. A committee was set up to define the concept and organize the event. It included the two vice-principals, a parent volunteer, one elementary teacher, one secondary teacher, and an animator in the spiritual care and guidance and community involvement service. "This gave us a much broader perspective to create an activity that would be truly meaningful for everyone," said Larouche. They identified the event's objectives: to enable students to discover tools that would make their transition to secondary school easier; to increase their motivation, to give meaning to the transition from elementary to secondary school, to reduce stress associated with changing schools, and to give students confidence to face a new situation. "We identified what we needed to demystify," added Myrna Dupoux, vice-principal of École secondaire Jean Grou. "For example, the stress of the combination lock. When students arrive at the school, they get their own locker with a lock and a secret code to open it. As adults, we tend not to realize it, but this is complicated for young people! So we tried to create activities that would eliminate the stress of these situations when they come to secondary school."

Preparing the event was not easy, the team confides, its members smiling. Working with volunteers, they organized workshops, created posters and a flyer for registration, sought partners and sponsors, divided up the tasks on the day of the event, prepared the materials and equipment, etc. When the 2004-2005 school year began, they were finally ready for the premiere.

How it went

At the start of the year, the 120 Elementary Cycle Three students at École Simone-Desjardins were invited to register for a convention at École secondaire Jean Grou entitled, *Un pas… sage vers le secondaire*. "I went around to all the classes to present the project and explain its objectives," said Ann McClung, an animator in the spiritual care and guidance and community involvement service. "Right away, students were very interested."

The convention took place in mid-October on one of the secondary school's pedagogical days. Students were greeted by members of the organizing committee as well as elementary and secondary teachers. They received a bag (sac-ADO) full of gifts (diary, combination lock, magazines, pencil, first aid kit, dental hygiene kit, etc.). In the morning, after a word of welcome from the school principal, students attended a plenary session entitled *Un pas vers l'avenir* (A step towards the future), followed by a workshop they had previously chosen (on knowing yourself, how secondary school works, or working in a team). At lunchtime, they took part in a rally and visited the exhibitors' hall, where nine neighbourhood organizations were represented. The afternoon was more relaxed, with a choice of sports and cultural activities.

The benefits

"It was like the first day in secondary school," explained Dupoux. "They got a chance to become familiar with the school. Since it was a pedagogical day, there were no other students." The future secondary students acted truly grown up from the event's start to finish: there were no discipline problems or late arrivals. "We gave them a lot of responsibility and freedom in this project and, it must be said, they handled it very well," Larouche emphasized.

The students seem to have appreciated the experience. "The activities were very enriching," said elementary teacher Joëlle Polifort. "Several students are more confident and ready to make the leap. The project aimed to make the transition to secondary school less intimidating, and it succeeded! They're less anxious, less worried. It's as if they know where they're going now. A few students who had thought of going to private school now want to go to Jean Grou." Larouche made a similar observation. "They returned to school proud of themselves. They're the only ones to have participated in the convention so far. They have the privilege of putting a combination lock on their school locker now. They experienced something that was unique, since it was a pilot project for the entire school board. They have a feeling of pride, of belonging; in short, they have more self-confidence."

"Parents said their children were thrilled with the visit," said Josée Hearson, a parent volunteer. "I'm already getting calls from parents who are asking us not about discipline or how the school works," said Dupoux, "but about the teaching and course offerings at Jean Grou. It's a very positive sign." Another important benefit: the activity has established contact between the elementary and secondary teachers.

Un pas... sage vers le secondaire

Welcome: 8:30 to 9:30 a.m.

Mandatory workshop: Opening presentation on school motivation
"Un pas vers l'avenir" (9:30 to 10:30 a.m.)

Choice of one of the following three workshops (10:45 to 11:45 a.m.):

Workshop 1 — "Un pas chevaleresque vers soi"
This workshop enables participants to discover their tastes, interests and particular style and to recognize their strengths and their limitations.

Workshop 2 — "Un pas vers la débrouillardise"
This workshop enables participants to discover and develop tricks to be a resourceful student in secondary school.

Workshop 3 — "Un pas vers la coopération"
This workshop enables participants to appreciate teamwork and to become familiar with the principles of cooperation.

Choice of one of the following eight activities (1 to 2 p.m.):

Floor hockey, basketball, visual arts, swimming, agricultural science, computers, library, music.

By Marie Hélène Giguère

"I drew on the Québec Education Program," Charbonneau explained. "I looked at the worlds and the orientations and features of the general concepts. I chose the material world and the living world. Then I looked for a theme that would have an impact on my students: water. They had heard about the tsunami and seen images on television; some of them spend their vacations in cottages where they have to boil the water before drinking it; they're sensitive to waste and to the environment. I wanted to help them become aware that drinking water is a precious resource, and that we're very privileged in Québec to have so much of it. At the same time, this topic allowed me to cover a lot of knowledge: mass, volume, temperature, mixtures, solutions, the structure of atoms, properties, changes, separation methods, etc."

Brainstorming

The first part of the project took place in the classroom. "I wanted to begin with their prior knowledge about drinking water. The students therefore made an 'inventory' of their collective knowledge on the topic. Then, using books, movies, newspapers and the Internet, we verified and validated this knowledge. The students kept logbooks from start to finish, enabling me to follow their process very closely."

The lab

Keeping in mind everything they had now learned, how would they go about transforming polluted water into drinking water? That was the question Charbonneau asked her students. "Each team had to submit a protocol before going into the laboratory. Some proposed to filter or boil the water; others were already thinking of distillation. Once in the lab, the students had even more questions. For example, some of the mixtures I had prepared contained colouring. You can filter and boil water, but how do you get rid of its yellow colour? Back in the classroom, we reviewed what had gone on in the lab so that the students could take stock of their experience."

Evaluation

You're lost in the woods. You have your knapsack and the usual camping equipment, but no drinking water. How can you make the water you find in nature drinkable?

"The students searched their imaginations. They pierced tiny holes in aluminum plates and used strips of cloth from white T-shirts to filter the water; they made a fire to boil the water; etc. Through this evaluation situation, which was in fact a problem to be solved, I could see exactly what each student had learned."

For Charbonneau, evaluation also takes place in the heart of the action, as it did while the students were carrying out their experiment. This kind of evaluation involves observation. "During the labs, I circulate and I ask the students questions. I push them to carry their reasoning a step further. My role is one of supervision and guidance. Of course, it's not the easiest method. But I'm convinced that it's worth it. I can clearly see the students are motivated, even the boys! For me, it's a challenge. And now that my first project is finished, it will be much easier for me to develop others. I too have learned from my mistakes!"

By Marie-Hélène Giguère

While Martin Gélinas (host of the game show *Génies en Herbe*) asks the audience to be silent, the players concentrate and are already reaching for their pushbuttons. The audience, made up mostly of teachers and parents, holds its breath. The first question is hardly finished and the two finalist teams have already launched into an impressive duel that many adults would not even dare think of participating in.

Each year, more than 250 secondary and college students from across Québec put their knowledge to the test by participating in the Tournoi Jeunes Démocrates. This quiz game allows contestants to measure their knowledge of the evolution of democracy in the world and, more specifically, of the parliamentary institutions in Québec. It is intended for Secondary IV and V and college students.

Members of the winning team in each category (secondary and college students) are awarded scholarships ranging from $500 to $2500, provided jointly by the Jean-Charles-Bonenfant Foundation and the Commission de la capitale nationale du Québec.

The 13th edition of the tournament took place from April 15 to 17, 2005. The teams, made up of four players each, competed in over 13 subject areas, including the political and constitutional history of Québec, Québec political figures and their roles, political history of the 20th century, Robert Bourassa, and current events in national and international politics. The general public was invited to watch the finals live on the National Assembly's television channel or by Web broadcast on its Web site.

Dominic Désilets teaches French at Jean-Eudes secondary school in Montreal. Since 1998, he has organized training for participants in the tournament. "The students begin training in December, about ten hours a week. Obviously, there's a certain amount of information they have to learn by heart, such as names and dates. But their preparation also involves a lot of research. For example, for the Robert Bourassa category, each player presented a 12-page research paper to the other players, in the form of an oral presentation. In addition to developing their ability to use ICT by surfing the Internet, they made connections with their course content (history of Québec, contemporary history of Canada, etc.).

Preparing for this event helps students develop their concentration, their intellectual rigour, their curiosity and their general culture. Some of them discovered an interest in politics and national and international current events. And, since the teams are usually made up according to each person's strengths, the students have to learn to recognize their strengths and those of others. They have to learn to listen, to work together and to communicate. This tournament gives young people a chance to experience something exceptional. Above all, by contributing to their understanding of our political system, it develops their critical judgment and helps make them better citizens. Each year they come out of it thrilled with their experience, whether they win or not!"

Pre-registration for the Tournoi Jeunes Démocrates usually takes place in December.

For more information, visit the Web site of the National Assembly, <**www.assnat.qc.ca**>, under the heading ***Mission éducative***.

By Marie-Hélène Gagnère

At the start of each school year, Jean-François Labbé, a science teacher in Secondary Cycle One at École Roger-Comtois, introduces his new students to the rules of conduct for the laboratory. "I use an overhead to explain the rules they have to follow in the lab. But it's very prescriptive, so I was looking for a more interactive way to get them to develop safe habits," he explained. "I therefore put out a call to tender to the students in the school's Intégra-TIC program (program for integrating ICT), and they responded immediately. The project was directly in keeping with the spirit of Défi prévention jeunesse, a program in which we really wanted to participate."

Sylvain Payeur, a teacher in the Intégra-TIC program, explained that this type of project provided him with a unique opportunity. "In Intégra-TIC, we operate like a business. Students can respond to all kinds of bids for tender. I support and guide them in carrying out their projects. But it's still project-based learning, so I also make sure they ask themselves the right questions. For example, 'Will my product meet the requirements and expectations of the client?'"

Guided by their teacher, the six Secondary IV students—Maxime Roussy-Chabot, Kevin Simard, Sylvain Fillion, Alexandre Jean, Maxime Boily-Boivin and Benoît Lapointe—created a software program for Secondary I students.

"I was immediately motivated by the potential for using animation in this kind of software," said Sylvain. "We wanted to invent something that would help younger students learn while having fun."

"We wanted to get away from just telling people, 'Don't do that!'" Maxime continued. "With this program, students learn by themselves, so the message is positive."

The students set to work in mid-February, devoting three hours a week to the project. "It's really hard," Sylvain and Maxime admitted. "You have to keep starting over. You have to be very precise. Sometimes you spend hours on the tiniest details."

The young programmers first worked with Labbé, the science teacher, to decide on the content. "We had to learn about all the rules that have to be observed in a lab," explained Kevin. "Because even though we wanted to make it fun, it's a serious topic. Too many students are still unaware of the risks."

The result was an interactive software program, designed with humour and pizzazz, that teaches young students how to act safely in a laboratory.

On the Web site, Einstein greets the program's users, crying, "Yo! It's not hard!" before the rules are shown one by one. Users then enter the school through the main door, and find themselves in the hallway leading to the labs. Upon entering the first one, they see a student wearing headphones. Careful! Are you allowed to listen to music in a lab? The user must click on the headphones and put them away. In another case, a student is bent over her workstation. Danger! Her long hair is loose. Using the mouse, the user must tie back the student's hair.

"It's motivating to know that the next group of Secondary I students will use our software. We'll pass by Jean-François's science classroom, and we'll see a whole bunch of young people playing and learning with our software!" said an enthusiastic Kevin.

For Labbé, the goal is to make students as autonomous as possible. "With this software, they have to question themselves about safe behaviours. I'm no longer the one telling them, 'Do this' or 'Don't do that.'"

As for the creators, nothing seems to stop them. "They even wanted to take the same idea and transpose it to other areas of the school, such as the library or the cafeteria," said Payeur.

To find out more about the Défi prévention jeunesse program, visit the Web site below.

<www.csst.qc.ca/jeunes>

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